SUMMARY OF
AVIATION BASIC ELECTRONICS TRAINING SYSTEM (AT)

APRIL 1999 **Device 6B39**

NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION ORLANDO, FLORIDA

TRAINING CATEGORY:

AVIATION

ORIGINATING AGENCY:

CNO/AIR

SECURITY CLASSIFICATION OF DEVICE:

Device 6B39 is unclassified.

PURPOSE OF DEVICE:

Provide enlisted Navy and Marine Corps personnel with training in basic aviation electronics

INTENDED USE:

The purpose of the training device is to provide Enlisted Navy and Marine Corps personnel with training in aviation basic electricity, and electronics in an electronic classroom environment. The training provided will be the prerequisite for completion of Avionics Technician (AT) Class "A" school.

FUNCTIONAL DESCRIPTION:

Device 6B39 Serial Numbers 001-15 are installed in rooms, 2206, 2207, 2208, 2209, 2302, 2210, 2328, 2301, 2329, 2211, 2212, 2330, 2122, 2112,and 2332 in Building 3460 at NATTC Pensacola, FL N63093. A Courseware Development Station (CDS) for training curriculum maintenance is located in room 2204.

The classrooms have an Instructor Operator Station (IOS), a Student Work Station (SWS), and a Classroom Presentation System (CPS) networked together enabling the presentation of training to 26 students.

The IOS consists of a CPU, (2) video monitors, video distribution bus, visual presenter, LaserJet printer, Uninterruptable Power Supply (UPS), and a Video Cassette Recorder/player (VCR) networked to the SWS and the CPS. The IOS is the master station from which the instructor has full curriculum control of the Student Work Station displays and test consoles. The IOS also has the ability to monitor individual student progress and maintain student records.

The SWS consists of a CPU, test console, video distribution bus, and UPS. The SWS is equipped to allow the instructor to present courseware, and lead the students through a lab portion of instruction. During labs the students perform actual troubleshooting of circuits using learned theory and troubleshooting techniques. GFE multi-meter, function generator, and oscilloscopes are provided to solve the problems. Real-time feedback is generated using the response capabilities of the test console. The results are collated by the software at the IOS and stored on the server.

The CPS is a projector with audio capability operated by a remote mouse. The equipment is interfaced with the IOS allowing the instructor to project courseware on the screen for all students to view.

The CDS is designed and fielded as a sub-system of the 6B39. It is provided for long-term life cycle support of the trainer curriculum software. The station allows the Instructional Developers to create, modify, and test ICW to be utilized on the instructor and student platforms. For compatibility the equipment configuration of the CDS matches the configuration of the IOS plus a SWS test console for test procedure checks, and has a flatbed scanner to assist with data input. The CDS also has a projector and screen for viewing the newly developed or edited lessons.

The 6B39 classroom is networked using a Local Area Network (LAN) that is interfaced to the NATTC Wide Area Network (WAN) within the training complex. The 6B39 utilizes servers located within server farm RM 2219 for information storage and retrieval.

PHYSICAL INFORMATION:

The 6B39 is modular in nature allowing flexibility in classroom orientation.

The minimum room size with 26 student stations and an IOS is 25’ x 31’.

EQUIPMENT REQUIRED (Not Supplied):

Multi-meter, Digital
Oscilloscope
Frequency Synthesizer

POWER REQUIREMENTS:

115/240 vac, 3 wire, 50-60Hz, single phase

PUBLICATIONS FURNISHED:

Maintenance Instructions, Device 6B39, NAWCTSD P-7371 (U)

COTS Manuals, Device 6B39, NAWCTSD P-7372 (U)

Maintenance Requirements Cards, Device 6B39, NAWCTSD P-7370 (U)

Training System Utilization Handbook, Device 6B39, NAWCTSD P-7373 (U)

PERSONNEL:

Instructor – One rate qualified Navy Enlisted person.

Trainees – From 1 to 26 Aviation Electronics “A” school students.

Maintenance Personnel – Qualified Navy or COMS personnel, quantities determined by contract.

CONTRACT IDENTIFICATION:

Manufactured by JIL Information Systems Inc., Orlando, Florida, under NAWCTSD Contract No. N61339-98-C-0039